

#### IV. REMARKS

Applicant respectfully traverses the Examiner's Final Rejection of claims 1-27, for the reasons set forth below.

As acknowledged by Applicant in the "Background Information" section of his application, barge-in systems have been known in the prior art. However, such prior art barge-in systems have limitations. For example, some barge-in systems may suspend the outgoing prompt upon receiving any response or input, including extraneous noise, even though the caller actually still desires to hear the rest of the prompt. *See* p. 4, lines 5-11. Another prior art approach suspends the outgoing prompt only if certain pre-defined and limited user inputs are recognized. However, such a system, known as a "small vocabulary" system, is only effective where the user's likely responses to the prompt are limited. Such a prior art system is not feasible for modern voice processing applications which involve large vocabulary speech recognition. *See* p. 4, line 12 to p. 5, line 3.

The Examiner has not cited to any teachings in Van Tichelen which improve upon the above described teachings of the prior art. Furthermore, the Examiner has not provided support for the contention that Van Tichelen teaches all the limitations of Applicant's claimed invention.

Van Tichelen teaches a speech controlled computer user interface for managing communications between a user and one or more computer applications.

The user interface has a speech layer, an utterance layer, and a discourse layer. The speech layer is in communication with the user and converts between speech messages and text messages. The utterance layer is in communication with the speech layer, and converts between text messages and semantic meaning messages. The discourse layer is in communication with the utterance layer and the at least one application program, and processes messages from the user and the at least one application program, and generates responsive messages to the user and the at least one application program.

*See* Abstract of Van Tichelen.

Van Tichelen also discloses that it supports barge-in capability. *See, e.g.*, Col. 14, lines 55-62. However, the Examiner has not cited to any teachings which reflect that Van Tichelen teaches barge-in with the capabilities set forth in Applicant's claimed invention. The disclosure concerning barge-in capability in Van Tichelen is very limited, and there does not appear to be any teachings which reflect that the barge-in capability has any more functionality than what was known in the prior art described above. For example, barge-in capability of Van Tichelen may be limited to a system which interrupts the prompt for any user input, including non-responsive noise. Van Tichelen may also only support barge-in for "small vocabulary" applications. The Examiner has not provided any cites that support the position that Van Tichelen teaches barge-in with any more capabilities than these prior art implementations.

As stated above, the teachings in Van Tichelen relating to barge-in functionality are very limited. However, based on what is disclosed, it appears that Van Tichelen actually teaches away from the type of barge-in capability set forth in Applicant's claimed invention. For example, Van Tichelen refers to conversation management as being both "event driven" and "data driven." Van Tichelen then states: "Being event driven supports features such as . . . barge-in capability, time outs . . . . From a data driven perspective, conversation data 703 uses data frames and slots with verification and confirmation." Col. 14, lines 55-60 (emphasis added). Conversation data is kept in the form of data frames, and each data frame has various specified slots in which relevant data is maintained. Col. 14, lines 30-37. Thus, from these teachings, Van Tichelen appears to indicate that its barge-in capability only occurs based on some event occurring (*e.g.*, any input or response from a user) and is not data driven (based on an analysis of the actual content of the user's conversation).

As discussed in Applicant's January 30, 2003 Response to Non-Final Office Action, with regard to prompts, Van Tichelen merely teaches that they may be modal (a dialogue cannot continue without input) or non-modal (a dialogue can continue without input). *See* Col. 15, lines 4-8. Van

Tichelen does not disclose that the input has to satisfy any particular conditions in order for the dialogue to continue in response to a modal prompt. Van Tichelen also does not disclose having the playing out of the prompt suspended if certain conditions are satisfied. Having a non-specified input is the only condition disclosed for the dialogue to continue; suspension of the prompt before it is finished playing based on particular input conditions is not discussed.

Van Tichelen does not teach each and every limitation of Applicant's claimed invention. For example, Van Tichelen does not teach "performing speech recognition on said audio input to determine a corresponding text" and then "terminating the playing out of the prompt" based on "said text satisfying said one or more conditions, otherwise, continuing the playing out of said prompt." In fact, Van Tichelen is directed to having a user begin a dialogue after the system is initialized, and is not directed to having the user respond to a prompt. *See, e.g.*, Col. 12, line 64 – Col. 13, line 40, where the user calls into an e-mail application by telephone and asks the system for new e-mail. Furthermore, as discussed above, Van Tichelen does not teach suspension of the prompt before it is finished playing based on particular input conditions.

In the Final Office Action, the Examiner asserts without support or a cite to teachings in prior art that "one of ordinary skill in the art familiar with barge-in systems know that systems that accurately recognize words which satisfy desired conditions turn off the prompt being generated." Page 2. The Examiner did not offer any objective evidence, such as cites to prior art, in support of this conclusory assertion. Accordingly, under the Federal Circuit case law discussed below, the Examiner's argument does not adequately support a determination of unpatentability.

In a recent decision from the United States Court of Appeals for the Federal Circuit, the Federal Circuit noted that when the patent examiner and Board "rely on what they assert to be general knowledge to negate patentability, that knowledge must be articulated and placed on the record." *In re Sang-Su Lee*, 277 F.3d 1338, 1345 (Fed. Cir. 2002). Specifically, the Federal Circuit noted that

conclusory statements about what is "basic knowledge" or "common sense" by themselves do not adequately support a determination of unpatentability. *See Id.* at 1343-44.

For at least these reasons, Applicant submits that Van Tichelen does not teach each and every limitation of Applicant's claimed invention, and further that the Examiner has not provided adequate support for a determination of unpatentability of claims 1-27.

## V. CONCLUSION

In view of the remarks set forth herein, the application is believed to be in condition for allowance and a notice to that effect is solicited. Nonetheless, should any issues remain that might be subject to resolution through a telephonic interview, the Examiner is requested to telephone the undersigned.

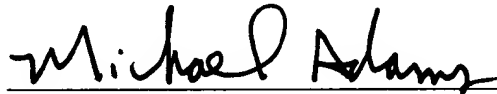
Respectfully submitted,



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## CERTIFICATION UNDER 37 C.F.R. § 1.8

I hereby certify that this correspondence (along with any item referred to as being enclosed herewith) is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on June 6, 2003.



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